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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,248

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Jae-Sun Cha

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EXAMINER

DESIR, PIERRE LOUIS

ART UNIT

PAPER NUMBER

2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,248	Applicant(s) CHA ET AL.	
	Examiner PIERRE-LOUIS DESIR	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 01/25/2011 have been fully considered but they are not persuasive.

Applicants argue that Koo fails to provide any disclosure indicating that the ranging request message from the subscriber includes a base station identifier of a previous serving base station. Applicants further assert that the teaching of Koo clearly illustrate that the identifier would not be required and Koo teaches away from the inclusion of a previous BS identifier in the ranging request message. Therefore, applicants conclude, Koo does teach the reception of ranging request message, which includes a base station identifier of a previous serving base station, at a target base station from a subscriber station when a drop situation is detected by the subscriber station.

Examiner respectfully disagrees.

Although Koo does not explicitly disclose that the ranging request includes the serving base station identifier, one skilled in the art would have found obvious that the entire procedure takes place with the assistance of the previous serving base station.

For instance, it is illustrated the MSS measures the S/R as applied to the serving base station. Based on the measurement, the MSS send MSSHO-REQ with possible target to the serving BS (see page 9, fig. XXX, example of HO calls flow by MS). Therefore, it is clear that the mobile station detects a change in signal quality. The results of the measurement is the sole reason why the MSS sends the MSSHO-REQ to the serving base station.

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Now, as disclosed in the previous rejection. It is known in the art to have base stations communicating with a plurality of mobile stations. And, more than one mobile station at a time may send ranging request to a target base station. The target BS, because of the HO-notification message, acquired MSS unique identifier and the serving BS-ID and required bandwidth and QoS.

As known in the art, the target base station ID and the MS-ID are included in the ranging request message. However, one skilled in the art would find obvious, in the absence of specific disclosure of what constitutes the serving BS-ID, that there would be some expectation to also include the serving BS-ID since the target base station would need to map the MS-ID with the serving BS-ID to acquire information related to the mobile station so that appropriate services may be rendered to the Mobile station.

Applicants' teaching away statement is merely a conclusory statement without any proper evidence on how the disclosure of the reference teaches away from the claim.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (previously disclosed and cited by examiner).

Regarding claims 20 and 30, Koo discloses a method of performing a handover on a subscriber station in a target base station (see pages 9-10), the method comprising:

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receiving a ranging request from the subscriber station (i.e., RNG-REQ from MSS to target BS) (see pages 9-10, fig. XXX) when a drop is detected by the subscriber station (i.e., measurement of S/R) (see pages 9-10, fig. XXX); transmitting a response message on the ranging request message to the subscriber station (i.e., RNG-RSP) (see pages 9-10, fig. XXX); and performing network re-entry on the subscriber station (section 6.2.2 describes a MSS that is trying to re-enter the network after a HO, and as result, a MSS-info message is sent from one BSS to another to request information about a MSS) (see page 4).

Koo, however, does not specifically disclose a method comprising including a base station identifier of a previous serving base station in the request, and comprising acquiring information of the subscriber station through the base station identifier.

However, Koo discloses that I-am-host-of message is sent by a BS to notify other base station that a certain MSS is registered with it. The message shall be sent upon MSS registration, and periodically. The message contains sender BS-ID, Target BS-ID and MSS unique identifier (see section 6.2.1 and page 4). And in section 6.2.6, it is described and illustrated that a serving BS communicates with a target base station informing it of handover intention of the MSS. As a result the serving BS communicate a HO-IND message to the MSS. The target BS transmits both a DL-MAP and UL-MAP to the MSS, as a result, the MSS transmit a RNG-REQ to the target base station, And receives from the target BS a RNG-RSP.

Now, one skilled in the art would find it to be obvious that the MSS has to include the identification of the previous serving base station to permit the target BS to properly acquire information that it has already received during the HO-notification message (section 6.2.4, page

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5), message that includes the MSS unique identifier and sender BS-ID and required bandwidth and required QoS.

Regarding claim 21, Kitroser discloses a method (see claim 20 rejection), wherein the acquiring comprises: requesting the information of the subscriber station to the previous serving base station based on the base station identifier of the previous serving base (i.e., MSS-info-request message) (see page 4, section 6.2.2); and receiving the information of the subscriber station from the previous serving base station (i.e., MSS-info-response message) (see pages 4-5, section 6.2.3).

Regarding claims 22, 25, 28, 31, and 34, Koo discloses a method (as described above) wherein the ranging request message further includes a media access control (MAC) address of the subscriber station (i.e., the RNG-REQ provided to the target BS includes 48-bit universal MAC address) (see page 7, section 6.2.6).

Regarding claims 23, 26, 29, 32, and 35, Koo discloses a method (see claims 20, 24, 27, 30, 35 rejections) wherein a length of the base station identifier of the previous serving base station length is 48 bits (see section 6.2.1, table 2).

Regarding claims 24, 27, and 33, Koo discloses a method of performing a handover in a subscriber station of a communication system, the method comprising: transmitting a ranging request message to a target base station (i.e., RNG-REQ from MSS to target BS) (see pages 9-10, fig. XXX) when a drop is detected by the subscriber station (i.e., measurement of S/R) (see pages 9-10, fig. XXX); receiving a ranging response message from the target base (i.e., RNG-RSP) (see pages 9-10, fig. XXX) and performing network re-entry through the target base station (section 6.2.2 describes a MSS that is trying to re-enter the network after a HO, and as result, a

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MSS-info message is sent from one BSS to another to request information about a MSS) (see page 4).

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However, Koo discloses that I-am-host-of message is sent by a BS to notify other base station that a certain MSS is registered with it. The message shall be sent upon MSS registration, and periodically. The message contains sender BS-ID, Target BS-ID and MSS unique identifier (see section 6.2.1 and page 4). And in section 6.2.6, it is described and illustrated that a serving BS communicates with a target base station informing it of handover intention of the MSS. As a result the serving BS communicate a HO-IND message to the MSS. The target BS transmits both a DL-MAP and UL-MAP to the MSS, as a result, the MSS transmit a RNG-REQ to the target base station, And receives from the target BS a RNG-RSP.

Now, one skilled in the art would find it to be obvious that the MSS has to include the identification of the previous serving base station to permit the target BS to properly acquire information that it has already received during the HO-notification message (section 6.2.4, page 5), message that includes the MSS unique identifier and sender BS-ID and required bandwidth and required QoS.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PIERRE-LOUIS DESIR whose telephone number is (571)272-7799. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571)272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PIERRE-LOUIS DESIR/
Primary Examiner, Art Unit 2617